

Prior to the moderation exercise, please complete the following information and submit it to your facilitator with assessment evidence from one learner that you judge to have successfully attained the Es and Os.

School Code	
Practitioner Code	W4
Curriculum Area(s)	Literacy and Science
Level	2 nd
Stage(s)	P6/7
Specific subject (if applicable)	

Experiences and Outcomes:

I have collaborated in activities which safely demonstrate simple chemical reactions using everyday chemicals. I can show an appreciation of a chemical reaction as being a change in which different materials are made.

SCN 2-19a

When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking.

Tools

LIT 2-02a

I can show my understanding of what I listen to or watch by responding to literal, inferential, evaluative and other types of questions, and by asking different kinds of questions of my own.

Understanding, Analysing & Evaluating

LIT 2-07a

Learning Intentions:

- We are learning to work together to demonstrate a safe chemical reaction
- We are learning to create questions which will help us make predictions when investigating chemical reactions.
- We are learning to listen to our peers' predictions and use these to build on our own thinking.

Success Criteria:

- I know what an open questions is and can list the 5 Ws and H
- I can prepare open ended questions of my own which help me predict
- I can ask these questions during an experiment and build a picture of what is happening and why.
- I can listen to my peer and show I am listening by asking follow up questions.
- I can work safely with a partner.

Practitioner Moderation Template

Learner Evidence

Briefly outline the range of quality learning experiences that have been provided: (Remember – Breadth, Challenge and Application)

Breadth/Depth

Questions used to allow learners to lead their own learning and encourage them to actually listen to each other and build their learning based on discussion
Opportunities to use descriptive language and predict and share thoughts and ideas and discuss why (or why not) something has happened. Discussions linked to real life as many of them have had oil and balsamic vinegar so they had some background knowledge. Likewise these 5W and H open questions were used in a writing exercise which allowed them to see the depth it gives their planning and overall quality of work.

Challenge/Enjoyment

Children clearly enjoy ‘experiments’ as they can play, touch, feel, look at and comment on changes taking place before their own eyes. They worked in partners so plenty of opportunity to get stuck in and actively ‘do’ the experiment. Challenge was in place in that there were no instructions to follow or ‘teacher’ questions to answer. Children led their own learning and investigated in their own way using effective questions, answers and predictions.

Children were free to use ingredients as they wish and experiment with colour, volume, reactions and amounts. At the end all children were invited to look at each other’s work and comment on how they achieved a certain colour, or outcome.

Record the range of assessment evidence that was gathered (Say, Write, Make, Do)

Say - open questions, answers and predictions

Write – Open questions, evidence, diagram

Make/Do – carry out actual experiment

Pupil Voice

Children’s discussion scripted and annotated

Questions prepared and questions actually used in discussion marked with a ‘tick

Did the learner successfully attain the outcomes?

YES / NO

Briefly outline the feedback and next steps provided to the learners:

Next steps –

I asked the children what additional ‘ingredient’ could we use to create a longer reaction. The salt worked momentarily, however what can we use to extend the reaction.

I would be looking for the children to come up with ideas like sweets/vitamin C tablets/alka seltzer/bath bombs etc.

Science/Listening and Talking Moderation Event

I have collaborated in activities which safely demonstrate simple chemical reactions using everyday chemicals. I can show an appreciation of a chemical reaction as being a change in which different materials are made.
SCN 2-19a

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Tools

LIT 2-02a

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Understanding, Analysing & Evaluating

LIT 2-07a

Lesson 1 - 2 Context: Stand alone lesson - Children making a Lava Lamp

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Success Criteria

- I can list the 5 Ws and H
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Starter - The Story Game (Teaching Point: listening and prediction)

Children stand in circle, each child can only say one word and should end up with a very odd and sometimes funny story. eg.

ONCE, UPON, A, TIME, THERE, WAS, A, GREEN, ALIEN, WHO, WAS, CALLED, GEOFF.....

This encourages children to LISTEN and build on the story depending on what the previous person said.

Praise given to children who listen carefully and link their 'word' with what the previous person said.

Lesson

Task:

- ✓ Assess children who can come up with the 5 Ws and H (all children should know these) who what where etc...
- ✓ Hand out 'ingredients' for investigation.



Children to work in pairs to come up with a list of open questions which encourage predictions linked to chemical reactions when liquids are mixed. *(see evidence)

Discussed on board and developed some questions to make them more specific with adverbs etc eg. What happens when you pour in the oil quickly? slowly?

- ✓ Children were then left to complete the investigation.

Each partner was encouraged to ask a question and make a prediction before a 'reaction' took place. We decided to use a 'STOP AND PREDICT' card which each pair made on a piece of red card. This meant the child had to freeze and their partner ask a question to allow them to stop and predict. This was filmed so the children could comment afterwards to see if their predictions were correct.



Teacher: I explained to pupil X that I could hear that he was listening to the questions and building on his knowledge. I also praised him for using quality open questions and descriptive language. I gave praise for asking the question back to his partner to gain more knowledge before completing the action.

I asked pupil x to go back to his original questions and tick the ones which had been used and discuss with his partner and how helpful they were when making predictions. They then sat down and wrote down the 'answers' to these based on the evidence from the chemical reactions.

Pupil X Discussion with partner:

X: I think when I add the oil quickly it will all mix up and look all jumbled.

Y: What will happen when you add the oil slowly?

X: I think it will be quite gloopy but it will settle much more quickly than before. I think it will take about about 30 seconds to settle but I'm not sure about it mixing. Oil doesn't mix when I have it with that bread stuff in restaurants. There's lots here so it might mix better here.

What do you think?

Y: Yea I think the same. I don't think oil mixes very well but maybe we can stir it with the pencil.

X: Why do you want to mix it?

Y: To see what happens when it's mixed up.

X: We can wait for a couple of minutes and see what happens then we can mix it and then write down what happens.

Y: See, it didn't mix but it took a wee minute to settle down. Let's mix it now.

X: I'll mix it now. What's gonna happen do you think? Should I write it down first?

Y: If you want. You write this bit. I think it's going to mix pretty well.

X: It's mixing well but let's see what happens when we leave it. Look at theirs over there. It looks different. Leave it alone.

Y: See it told you. It's just sitting on top now like theirs. It doesn't like mixing.

X: What isn't mixing? The oil?

Y: Yea. Let's add salt now. That might help it to mix. What do you think? What happens when you put salt in stuff?

X: How do we put in the salt? Does it matter if we sprinkle it? I think we should sprinkle it in just to test it.

Learner Evidence

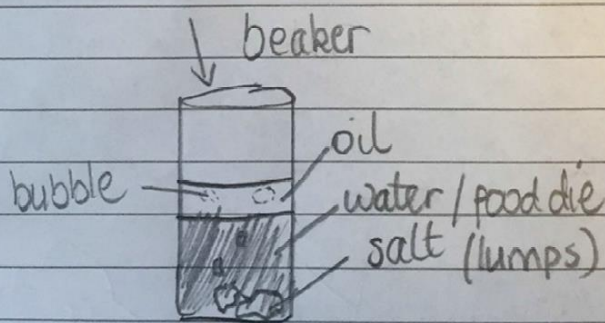
5:10:15

WHAT	WHERE	WHO	WHY	WHEN	HOW
<p>What?</p> <ul style="list-style-type: none"> • What happens when the oil gets poured with the water? ✓ • What colours do you have? ✓ • What happens when you mix the oil slowly and quickly? ✓ happen when you add • What will the salt? ✓ 	<p>Where?</p> <ul style="list-style-type: none"> • Where do I find the resources • Where do you pour the oil? 	<p>Who?</p> <ul style="list-style-type: none"> • Who will mix the salt? • Who will record the evidence 	<p>Why?</p> <ul style="list-style-type: none"> • Why does it mix slowly • Why does it take a long time to mix • Why does the salt do that ✓ • Why does oil do that ✓ 	<p>When?</p> <ul style="list-style-type: none"> • When do we add the oil? ✓ • When do they mix? ✓ • When do we add food drops 	<p>How?</p> <ul style="list-style-type: none"> • How is that? • How do you add it? ✓ • How come!
<p>T * Child ticked the questions which they "asked" during the experiment.</p>					
<p>T After listening in, the children asked and answered various questions</p>					
<p>T Feedback</p> <ul style="list-style-type: none"> * These are very descriptive open-ended questions. * You worked well in your group of 2. * These questions help you build on your own thinking 					

6/11/15

Evidence - notes

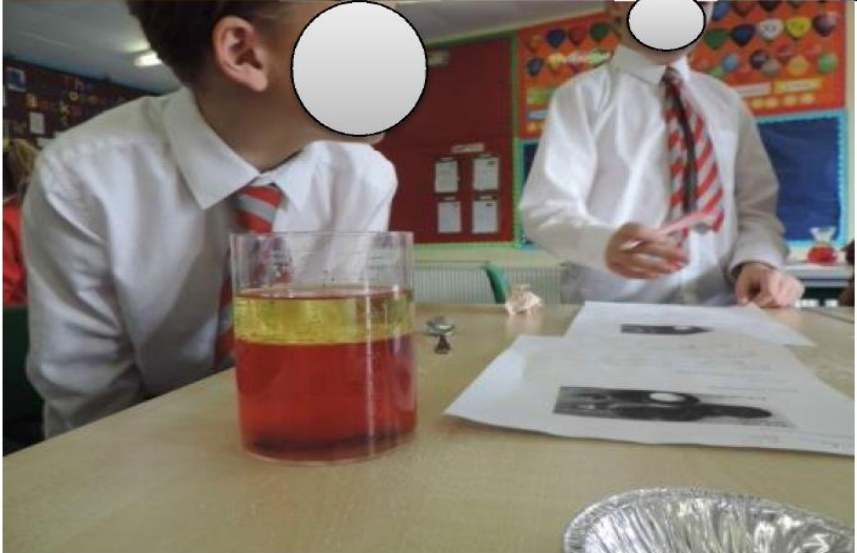
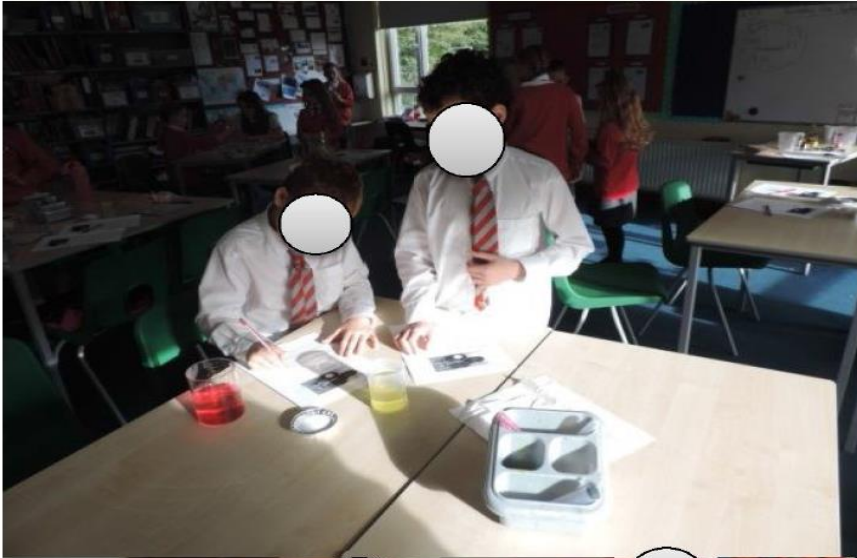
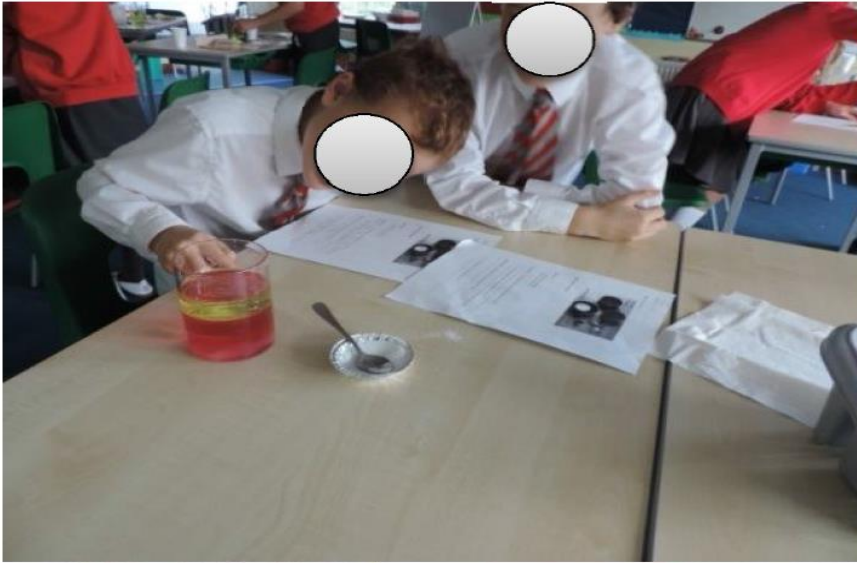
- ✓ The water and oil didnt mix well but at first it mixed up then after a while it sat on top of each other
- ✓ Oil is lighter than water so it didnt sink
- ✓ The salt went into lumps (not like in tea) and it took bits of food die with it (lumpy and bumpy)
- ✓ The salt sat at the bottom after a while
- ✓ It doesnt really matter how fast you mix the stuff it eventually sinks to bottom and oil sits on top of it
- ✓ You can make different colours by add more red or more green (orange = red + yellow)



(T) This shows you listened to your partner when you asked each other your open-ended questions

(T) Next steps discussed with child

- How can we create a 'longer lasting' chemical reaction? Once the salt has settled the reaction stops. What ingredient could create a longer reaction?



Photos showing final lamp